

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
 AN 2000:338140 CAPLUS  
 DN 132:310688  
 TI Acetylene substituting high-energy fuel gas and its additives  
 IN Zeng, Zhaoxiang  
 PA Peop. Rep. China  
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.  
 CODEN: CNXXEV  
 DT Patent  
 LA Chinese  
 IC ICM C10L003-00  
 CC 51-12 (Fossil Fuels, Derivatives, and Related Products)  
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1206039	A	19990127	CN 1997-108158	19970718 <--
AB	<p>The fuel gas is composed of di-Me ether 0-98, methane 0-98, ethane (or ethene) 0-98, propane (or propene) 0-98, butane (or butene) &lt;30, pentane &lt;1 and additive 1-5 wt.%. The additive is composed of explosion-proof smoke suppressor 0.01-1, combustion adjuvant 0-85, co-solvent 0-85, antistatic agent 0.01-0.025, temp.-increasing agent 0-5, suspending agent 0-10 wt.% and deodorizer as required. The explosion-proof smoke suppressor is selected from ferrocene, Co naphthenate, Mn naphthenate, Ba naphthenate, tetra-Et Pb and/or nitro-compd. The combustion adjuvant is selected from CS<sub>2</sub>, S and/or xylene. The co-solvent is selected from acetone, ProH, Me<sub>2</sub>CHOH, MeOH, EtOH, EtOAc, rosin and/or benzine. The antistatic agent is selected from polyoxyethylene, hydroquinone and/or Na alkyl-salicylate. The temp.-increasing agent is selected from B, Li, Mg and/or Al powder. The suspending agent is selected from glycerin and/or triethanolamine. The fuel gas has no pollution, high security and better cutting and jointing quality than that of acetylene.</p>				
ST	fuel gas additive acetylene substituting				
IT	Fuel additives Fuel gases Synthesis gas (acetylene substituting high-energy fuel gas and its additives)				
IT	56-81-5, Glycerin, uses 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses 75-15-0, Carbon bisulfide, uses 78-00-2, Tetraethyl lead 102-54-5, Ferrocene 102-71-6, Triethanolamine, uses 123-31-9, Hydroquinone, uses 141-78-6, Ethyl acetate, uses 1330-20-7, Xylene, uses 7429-90-5, Aluminum, uses 7439-93-2, Lithium, uses 7439-95-4, Magnesium, uses 7440-42-8, Boron, uses 7704-34-9, Sulfur, uses 62309-51-7, Propanol RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses) (acetylene substituting high-energy fuel gas and its additives)				
IT	74-82-8, Methane, uses 74-84-0, Ethane, uses 74-85-1, Ethene, uses 74-98-6, Propane, uses 106-97-8, Butane, uses 109-66-0, Pentane, uses 115-07-1, Propene, uses 115-10-6, Dimethyl ether 25167-67-3, Butene RL: NUU (Other use, unclassified); USES (Uses) (acetylene substituting high-energy fuel gas and its additives)				
IT	74-86-2, Acetylene, uses RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (acetylene substituting high-energy fuel gas and its additives)				

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DERWENT-ACC-NO: 1999-264473

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TITLE: Acetylene substituting high-energy  
fuel gas - and its  
additive

INVENTOR: ZENG, Z

PATENT-ASSIGNEE: ZENG Z[ZENGI]

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INT-CL (IPC): C10L003/00

ABSTRACTED-PUB-NO: CN 1206039A

BASIC-ABSTRACT:

The high-energy fuel includes in its components:

(1) methyl ether, (2) methane, (3) ethane or ethylene,  
(4) propane or propylene,  
(5) butane or butene, (6) pentane and an additive (7). The  
additives includes:

(1) ferrocene as an anti-explosion, smoke-eliminating  
agent; (2) carbon  
disulfide as combustion promoter; (3) isopropyl alcohol,  
(4) acetone and

(5)methyl alcohol as diluent solvent; (6)polyoxyethylene as antistatic agent;  
(7)magnesium and aluminium powder as temperature increasing agent;  
(8)triethanolamine as suspending agent; and an off odour agent (9). The production process of the fuel involves mixing the components and causes no environmental pollution. The fuel is safe and low in cost and can result in cutting and welding quality superior to that of acetylene.

CHOSEN-DRAWING: Dwg.0

TITLE-TERMS: ACETYLENE SUBSTITUTE HIGH ENERGY FUEL GAS  
ADDITIVE

DERWENT-CLASS: A95 E17 H06 M23

CPI-CODES: A12-T03A; E05-L02A; E10-B03B; E10-E04L1;  
E10-E04L3; E10-F02C;  
E10-H01E; E10-J02C4; E10-J02D; E31-N05B; H06-A;  
H06-D; M23-B;  
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